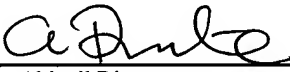


**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Patent Application of:	Group Art Unit: Not yet assigned
Applicant: Pantoliano <i>et al.</i>	Examiner: Not yet assigned
Serial No.: Not yet assigned	<u>Certificate of Mailing Under C.F.R. §1.8</u> I hereby certify that this correspondence and all marked attachments are being deposited by Express Mail, Express Mailing Label No.: EL 989434393 US on April 7, 2004 addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
Filed: April 7, 2004	By:  Abigail Rivamonte
Title: <i>Microplate Thermal Shift Assay Apparatus for Ligand Development and Multi-Variable Protein Chemistry Optimization</i>	

**INFORMATION DISCLOSURE STATEMENT**

MAIL STOP PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. § 1.56, Applicant brings the art documents listed on the attached Form PTO-1449 to the attention of the Examiner for consideration in connection with the examination of the above-identified application.

This Information Disclosure Statement (IDS) is being filed within the period specified at 37 C.F.R. § 1.97(b). Specifically, before mailing of a first Office Action.

Copies of the following documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.198(a)-(c) in Application No. 08/853,459, filed May 9, 1996 (U.S. Patent No. 6,036,920), which is relied upon for an earlier filing dated under 35 U.S.C. § 120: 1-5; 7-13; 15-19; 21-23; 31-33; 35; 37-39; 41-51. Thus, pursuant to 37 C.F.R. § 1.198(d), Applicants have not included copies of these references. Copies of the following documents are enclosed: 6; 14; 20; 24-30; 34; 36; 40.

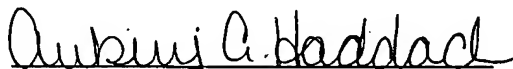
It is respectfully requested that the Examiner confirm consideration of the cited documents by initialing the attached Form PTO-1449 and returning a copy of the initialed form to Applicant.

The IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under 37 C.F.R. § 97(f), to enable Applicant to fully comply.

If any fees are due in connection with the filing of this statement, please charge all required fees to Deposit Account No. 50-2212, Order Number 044988.030.8977. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

Date: April 7, 2004

  
Aubrey A. Haddach  
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STATEMENT BY APPLICANT**

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Sheet 1 of 5

**Complete if Known**

Application Number	Not yet assigned
Filing Date	April 7, 2004
First Named Inventor	Pantoliano et al.
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	044988-0308977

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	1	US- 4,580,895	04-08-1986	PATEL	
	2	US- 4,626,684	12-02-1986	LANDA	
	3	US- 4,628,026	12-09-1986	GARDELL et al.	
	4	US- 4,774,055	09-27-1988	WAKATAKE et al.	
	5	US- 4,778,763	10-18-1988	MAKIGUCHI et al.	
	6	US- 5,096,807	03-17-1992	LEABACK	
	7	US- 5,255,976	10-26-1993	CONNELLY	
	8	US- 5,290,513	03-01-1994	BERTHOLD et al.	
	9	US- 5,314,825	05-24-1994	WEYRAUCH et al.	
	10	US- 5,324,635	06-28-1994	KAWASE et al.	
	11	US- 5,340,747	08-23-1994	EDEN	
	12	US- 5,355,215	10-11-1994	SCHROEDER et al.	
	13	US- 5,383,023	01-17-1995	WALLECZEK	
	14	US- 5,415,839	05-16-1995	ZAUN et al.	
	15	US- 5,436,718	07-25-1995	FERNANDES et al.	
	16	US- 5,463,564	10-31-1995	AGRAFIOTIS et al.	
	17	US- 5,496,519	03-05-1996	SCHACHER	
	18	US- 5,525,300	06-11-1996	DANSSAERT et al.	
	19	US- 5,557,398	09-17-1996	WECHSLER et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	20	EP 0 512 334	11-1992			
	21	EP 0 640 828 A1	03-1995			
	22	WO 94/05394	03-1994			
	23	WP 98/15969 A2	04-1998			

Examiner Signature	Date Considered
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2

of 5

**Complete if Known**

Application Number	Not yet assigned
Filing Date	April 7, 2004
First Named Inventor	Pantoliano et al.
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	044988-0308977

## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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<b>Sheet</b> 3 <b>of</b> 5	<b>Application Number</b>	Not yet assigned
	<b>Filing Date</b>	April 7, 2004
	<b>First Named Inventor</b>	Pantoliano et al.
	<b>Art Unit</b>	Not yet assigned
	<b>Examiner Name</b>	Not yet assigned
		<b>Attorney Docket Number</b> 044988-0308977

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	30	BRANDTS, J.F. and LIN, L., "Study of Strong to Ultralight Protein Interactions Using Differential Scanning Calorimetry", Biochemistry, 1990, pp. 6927-6940, Vol. 29, No. 29., American Chemical Society.	
	31	CHAVAN, A.J. et al., "Interaction of Nucleotides with Acidi Fibroblast Growth Factor (FGF-1", Biochemistry, 1994, pp. 7193-7202, Vol. 33, No. 23, American Chemical Society.	
	32	EFTNIK, M.R., "The Use of Fluroescence Methods to Monitor Unfolding Transitions in Proteins", Biophysical Journal, February 1994, pp. 482-501, Vol. 66, No. 2, Biophysical Society.	
	33	FREIRE, E., "Thermal Denaturation Methods in the Study of Protein Folding", Methods in Enzymology: Energetics of Biological Macromolecules, 1995, pp. 144-168, Vol. 259, Academic Press.	
	34	HAFF, L. et al., "A High-Performance System for Automation of the Polymerase Chain Reaction", Biotechniques, January 1991, pp. 102-112, Vol. 10, No. 1, Eaton Publishing.	
	35	HIGUCHI, R., et al., "Kinetic PCR Analysis: Real-time Monitoring of DNA Amplification Reactions", BIO/Technology, September 1993, pp. 1026-1030, Vol. 11, Nature Publishing.	
	36	HIGUCHI, R., et al., "Simultaneous Amplification and Detection of Specific DNA Sequences", BIO/Technology, April 1992, pp. 413-417, Vol. 10, No. 4, Nature Publishing.	
	37	MORTON, A. et al., "Energetic Origins of Specificity of Ligand Binding in an Interior Nonpolar Cavity of T4 Lysozyme", Biochemistry, 1995, pp. 8564-8574, Vol. 34, No. 27, American Chemical Society.	
	38	PILCH, D.S. et al., "Ligand-Induced Formation of Nucleic Acid Triple Helices", Proceedings of the National Academy of Sciences of the USA, September 1994, pp. 9332-9336, Vol. 91, No. 20.	
	39	RAMSAY, G. and EFTNIK, M.R., "A Multidimensional Spectrophotometer for Monitoring Thermal Unfolding Transitions of Macromolecules", Biophysical Journal, February 1994, pp. 516-523, Vol. 31, The Biophysical Society.	

<b>Examiner Signature</b>		<b>Date Considered</b>	
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		Filing Date	April 7, 2004
		First Named Inventor	Pantoliano et al.
		Art Unit	Not yet assigned
		Examiner Name	Not yet assigned
Sheet 4	of 5	Attorney Docket Number	044988-0308977

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	40	SCHELLMAN, J.A., "Communications to the Editor: The Effect of Binding on the Melting Temperature of Biopolymers", Biopolymers, 1976, pp. 999-1000, Vol. 15, No. 5, John Wiley & Sons.	
	41	TSAI, P.K. et al., "Formulation Design of Acidic Fibroblast Growth Factor", Pharmaceutical Research, May 1993, pp. 649-659, Vol. 10, No. 5, Plenum Publishing.	
	42	VOLKIN, D.B. et al., "Physical Stabilization of Acidic Fibroblast Growth Factor by Polyanions", Archives by Biochemistry and Biophysics, January 1993, pp. 30-41, Vol. 300, No. 1, Academic Press.	
	43	WARING, M.J., "Stabilization of Two-Stranded Ribohomopolymer Helices and Destabilization of a Three-Stranded Helix by Ethidium Bromide", The Biochemical Journal: Molecular Aspects, 1974, pp. 483-486, London: The Biochemical Society.	
	44	WARING, M.J. and HENLEY, S.M., "Stereochemical Aspects of the Interaction Between Asteroidal Diamine and DNA", Nucleic Acids Research, April 1975, pp. 567-586, Vol. 2, No. 4, Information Retrieval Ltd.	
	45	WEBER, P.C. et al., "Structure-Based Design of Synthetic Azobenzene Ligands for Streptavidin", J. Am. Chem. Soc., 1994, pp. 2717-2724, Vol. 116, American Chemical Society.	
	46	VOLKIN et al., "The Effect of Polyanions on the Stabilization of Acidic Fibroblast Growth Factor", Harnessing Biotechnology for the 21st Century, ed. Ladisch, M. and A. Bose, 1992, pp. 144-168.	
	47	Cytocalc Data Analysis System User's Guide, PerSeptive Biosystems, April 1995.	
	48	CytoFluor UU Fluorescence Multi-Well Plate Reader User's Guide, PerSeptive Biosystems, August 1995.	
	49	Phase I Grant Application for Michael Pantoliano for Automated Receptor Screening by Thermal Physical Assays, Department of Health and Human Services Form PHS-6246-1, August 11, 1994.	

Examiner Signature		Date Considered	
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Sheet

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	50	Phase II Grant Application for Michael Pantoliano for Automated Receptor Screening by Thermal Physical Assays, Department of Health and Human Services Form PHS-6246-2, December 14, 1995.	
	51	"Temperature Cyclers: Robocycler Gradient Temperature Cyclers", Stratagene Product Catalog, 1997-1998, pp. 236-237.	

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